

## DEPARTMENT OF PHARMACY AND CHEMISTRY.

Edited by FRED I. LACKENBACH.

(Devoted to the advancement of Pharmacy and its allied branches; to the work of the Council on Pharmacy and Chemistry of the American Medical Association, and to matters of interest bearing upon therapeutic agents offered to the medical profession. The editor will gladly supply available information on matters coming within the scope of this Department.)

### NEW AND NONOFFICIAL REMEDIES.

Since publication of New and Nonofficial Remedies, 1915, and in addition to those previously reported, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion with "New and Nonofficial Remedies":

**Mercurialized Serum, Mulford.**—A solution of mercuric chloride in normal horse serum diluted with physiologic sodium chloride solution. It is proposed for the treatment of syphilis, particularly the cerebrospinal type. It is supplied as:

**Mercurialized Serum, Mulford, No. 1.**—One 30 c.c. ampule containing the equivalent of 1.3 mg. (1/50 gr.) mercuric chloride with rubber tube and intraspinal needle.

**Mercurialized Serum, Mulford, No. 2.**—One 30 c.c. ampule containing the equivalent of 2.6 mg. (1/25 gr.) of mercuric chloride with rubber tube and intraspinal needle.

**Mercurialized Serum, Mulford, No. 3.**—A package of ten 30 c.c. ampules each containing the equivalent of 1.3 mg. (1/50 gr.) of mercuric chloride with rubber tube and intraspinal needle.

**Mercurialized Serum, Mulford, No. 4.**—A package of ten 30 c.c. ampules each representing 2.6 mg. (1/25 gr.) mercuric chloride with rubber tube and intraspinal needle.

**Mercurialized Serum, Mulford, No. 5.**—8 c.c. mercurialized serum, Mulford, containing the equivalent of 22 mg. (1/3 gr.) of mercuric chloride in a syringe graduated in fourths, with needle.

**Mercurialized Serum, Mulford, No. 6.**—A package of ten syringes, each containing 8 c.c. liquid which represents 22 mg. (1/3 gr.) of mercuric chloride. H. K. Mulford Company, Philadelphia, Pa. (Jour. A. M. A., Oct. 2, 1915, p. 1185).

**Radio-Rem, Outfit No. 4.**—An apparatus designed for the production of radio-active drinking water by the action of radium sulphate contained in terra cotta plates. It consists of two plates contained in 250 c.c. bottles; when the bottles are filled with water the two plates impart about 1.8 microcurie (5000 Mache Units) to the water in twenty-four hours. For action, uses and dosage refer to the article on radium in New and Nonofficial Remedies. Schieffelin and Co., New York (Jour. A. M. A., Oct. 9, 1915, p. 1281).

**Histamine Hydrochloride.**—The hydrochloride of the base beta-aminazolyethylamine (histamine). It is a valuable reagent for the standardization of pituitary preparations.

**Imido, Roche.**—A name applied to histamine hydrochlorid.

**Ampules Imido, Roche.**—Each ampule contains 1.1 c.c. of an aqueous 1 in 1000 solution of Imido, Roche (1 c.c. contains 1 mg.). Hoffmann-LaRoche Chemical Works, New York City (Jour. A. M. A., Oct. 16, 1915, p. 1367).

**Betanaphthyl Salicylate.**—The salicylic acid ester of betanaphthol. It passes the stomach unchanged, but is split into its constituents in the intestinal tract. It is believed to act as an intestinal antiseptic and to act in a similar way in the bladder. It is said to be useful in intestinal fermentation,

catarrh of the bladder, rheumatism, etc. Mallinckrodt Chemical Works, St. Louis, Mo. (Jour. A. M. A., Oct. 30, 1915, p. 1553).

**Betol.**—A name applied to Betanaphthyl salicylate (which see). Merck and Co., New York (Jour. A. M. A., Oct. 30, 1915, p. 1553).

### Items of Interest.

**The Soy Bean.**—The soy bean is of medical interest: (1) because it contains the enzyme, urease, which converts urea into ammonia and carbon dioxide and hence is used to estimate urea in urine; and (2) because soy bean products have been recommended as foods for diabetics. Street and Bailey of the Connecticut Agricultural Experiment Station, report that although the soy bean contains about 25 per cent. total carbohydrates, only about 8 per cent. composed of sugar, starch and dextrin, may be considered objectionable in a strict diabetic diet. Thus the sugar-forming carbohydrates contained in soy beans fall well within the limit of 10 per cent. regarded as safe for diabetics (Jour. A. M. A., Oct. 16, 1915, p. 1372).

**Camphor, Natural and Synthetic.**—Though having the same chemical composition, natural camphor is levorotatory while synthetic is optically inactive, it being a mixture of levorotatory and dextrorotatory molecules. Synthetic camphor, used externally and in moderate doses internally, has been reported to have the same effects as natural camphor. The evidence is, however, unsatisfactory. The natural product being readily obtainable, there is no warrant for the therapeutic use of synthetic camphor until more conclusive evidence is at hand (Jour. A. M. A., Oct. 30, 1915, p. 1555).

**Lactopeptine and Elixir Lactopeptine.**—Lactopeptine is sold under the claim that it contains pepsin, diastase, pancreatin, lactic acid and hydrochloric acid. In 1907 the Council on Pharmacy and Chemistry reported that Lactopeptine was practically inert—"essentially a weak saccharated pepsin," devoid of tryptic activity. An examination made by the Council in 1913 confirmed the previous findings. Nearly four months after publication of the last report, the manufacturers protested against the report claiming that Lactopeptine possessed pancreatic activity and contained "loosely combined" hydrochloric acid. The council now reports that an examination of the market supply demonstrated that a few recently manufactured specimens showed slight (therapeutically negligible) tryptic activity, but that most showed none; the amount of hydrochloric acid was insignificant. Again declaring Lactopeptine and Elixir Lactopeptine ineligible for New and Nonofficial Remedies, the Council points out that, whatever the tryptic activity of the mixture, it is therapeutically useless. Mixtures of pepsin and pancreatin are irrational. The two substances are not indicated in the same conditions nor can they act together. Under physiologic conditions such mixtures are chemically impossible. In a liquid medium the two substances destroy each other (Jour. A. M. A., Oct. 23, 1915, p. 1477).

**A Therapeutic Absurdity.**—Lactopeptine, whether in the form of an elixir, powder or tablets, is a therapeutic absurdity. Even if fresh specimens of the powder, possessing slight tryptic activity, have any advantage over old ones, there is no way of telling which the patient is likely to get, for the trade packages of Lactopeptine are undated. In liquid preparations like Elixir Lactopeptine, pepsin and pancreatin destroy each other (Jour. A. M. A., Oct. 23, 1915, p. 1466).

**The N. F. Imitation of Elixir Lactopeptine.**—Nearly forty years ago the essential worthlessness of Lactopeptine was brought to the attention of the pharmaceutical profession. In spite of this knowledge the pharmacists have included imitations of Lactopeptine and Elixir Lactopeptine in the National Formulary under the titles Compound

Powder of Pepsin and Compound Digestive Elixir. The N. A. R. D. Journal, devoted to the business rather than the professional side of pharmacy, defends the Compound Digestive Elixir on the ground that "physicians keep right on prescribing it." The pharmaceutical profession should consider that pharmacists will in the end lose the confidence of the medical profession and the public by the tolerance of worthless pharmaceuticals (Jour. A. M. A., Oct. 23, 1915, p. 1467).

Some "Patent Medicines" for External Application.—The following statements of composition are indicated by the reports of various state boards of health, the government chemists and the A. M. A. Chemical Laboratory: Amarol, a "complexion beautifier," is composed of Epsom salt 95 per cent. and borax 5 per cent. Anti-Freckle Lotion (Gustin's) contains mercuric chloride 1.5 per cent., alcohol 2 per cent. and water 96.5 per cent. Calocide, for "foot trouble," is sodium chloride 22.44 per cent., borax about 37.58 per cent., alum about 39.35 per cent., tannin small amounts. Cerol, which "cleans and clears the skin," is boric acid, stearic acid and perfume. Clearola, which will "whiten the skin," is sulphur. Cuticle Acid, to "remove dead skin," is alcohol 10 per cent. and oxalic acid 2 per cent. Derma-Royale for skin affections, is a dilute alcohol-glycerin solution with small amounts of camphor, myrrh, benzoin and possibly other aromatics in suspension. Eptol, a wrinkle remover, is essentially borax 37 per cent., soap and stearic acid 63 per cent. Fatoff was found to be essentially soft soap. Gloriot Balm, a vanishing toilet cream, is composed of stearic acid, soap and borax 23.7 per cent., water 76.3 per cent. Gloriot Glowene, said to be a substitute for soap, is soft soap. Zemo, for eczema, pimples, dandruff and similar affections, appeared to be a watery-alcoholic solution containing methyl salicylate, thymol, borax, tannic acid, glycerin, menthol and a phenol-like body (Jour. A. M. A., Oct. 16, 1915, p. 1365-7).

Somnoform.—This was originally composed of ethyl chloride 60 per cent., methyl chloride 35 per cent. and ethyl bromide 5 per cent. Now it is said to contain but 1 per cent. ethyl bromide. Like ethyl chloride, Somnoform has been used as a substitute for nitrous oxide before ether anesthesia and for short operations, but has been mostly used by dentists for extractions. It is doubtful if the mixture has any advantage over ethyl chloride. The mortality is less than that of chloroform, but twice that of ether and four times that of nitrous oxide (Jour. A. M. A., Oct. 16, 1915, p. 1391).

Iodum-Miller.—The A. M. A. Chemical Laboratory reports that Iodum-Miller was found to be essentially a solution of iodine and potassium iodide in glycerin containing 1.68 per cent. of free iodine. The Council on Pharmacy and Chemistry reports that Iodum-Miller was not eligible for New and Nonofficial Remedies because incorrect statements are made in regard to its composition; because unwarranted therapeutic claims are made for it; and because the application of a trade name to a simple solution of iodine is not to be countenanced (Jour. A. M. A., Oct. 2, 1915, p. 1202).

#### JOURNAL OF CUTANEOUS DISEASES.

Beginning with the January, 1916, number, The Journal of Cutaneous Diseases, including syphilis, will be published for the American Dermatological Association by W. M. Leonard, of Boston. Each number will contain 80 pages, and as far as possible be of interest and value to the general practitioner as well as to the dermatologist.

GEORGE M. MacKEE, M. D., Editor.

#### PEACHES PEELED BY LYE NOT INJURIOUS TO HEALTH.

In spite of the idea held by many people that lye-peeled peaches are injurious to health, Profes-

sor M. E. Jaffa, Consulting Nutrition Expert of the California State Board of Health, says that they are no more injurious than hand-peeled fruits. Except for the marks of the knife on the hand-peeled product, it is impossible to distinguish one from the other. Food value, flavor and quality are unchanged.

The process of peeling fruit by immersing it in hot lye, afterward washing several times with cold water, is used in many canneries throughout the State. The method is rapid and economical. Yet some people will not eat fruit that has been peeled by this process, fearing that it may be injurious to health. No question has been raised, however, concerning the use of the same process in preparing prunes for the market.

Analyses have been made in order to learn if the acidity of the lye-peeled peach is less than that of the hand-peeled peach, and it was determined that the lye process does not affect the acidity of the finished product. The housewife, then, may be assured that canned peaches, peeled by this process, are wholesale and that there is nothing in them that may be injurious to health.

#### THE AUTOLYSIN TREATMENT OF CANCER.

Richard Weil, New York (Journal A. M. A., Nov. 6, 1915), reviews the results of the Horowitz treatment of cancer, as carried out by Dr. Beebe in the General Memorial Hospital in New York City. In accordance with a well-defined policy of the hospital which approved the test of proposed therapeutic measures in cancer, Dr. Beebe was permitted to make a trial, he stating that he was in possession of complete knowledge of the composition and formula. Dr. Beebe was given the privilege of applying the treatment in a considerable number of cases, under the general clinical supervision of Dr. Weil. Only such cases were taken as could not be helped materially by other means available. In nearly all the cases the patients were given the benefit of radium or Roentgen-ray treatment in addition to the autolysin method. That all the patients were moribund or in a very serious condition was not the case. Some of the patients put in Dr. Beebe's hands were in apparently good physical condition, though the nature of their ailment, as often happens in cancer, made successful treatment by other methods impossible. If the treatment had any real value it should have been shown in such cases. Since Jan. 1, 1915, twenty-three cases have been treated in the wards of the hospital with autolysin by Dr. Beebe. Of these, fourteen patients died in the hospital and eight were discharged unimproved. Only one is at the present, to the best of Weil's knowledge, in a condition that could be considered an improvement over that at the time of his admission. Although the general outcome of the cases was not affected by Beebe's treatment, the clinical course was somewhat altered. The method caused, when injections were made into the tumors, suppuration and sloughing as is characteristic of irritant or destructive substances in such cases and did not in this constitute any advance over former methods. Subcutaneous injections given distant parts of the body were followed sometimes by improvement in the appearance of ulcerated tumors but no greater than that seen to follow the ordinary surgical dressings usually employed in such cases, and to these Weil attributes the temporary change for the better. The more general good effects claimed by Beebe from autolysin, such as relief of pain and insomnia, and increase of appetite, were what might be looked for, Weil claims, by the hopefulness aroused by a lauded new remedy. Contrasted with such occasional effects is another set of results very inadequately mentioned by Beebe in his articles. Half the patients at least were most unfavorably affected by the local injections. The pain was often so severe that the patients refused to accept the treatment.